CLAIMS

1. A method for fermenting a microorganism, producing a polypeptide of interest, in a culture medium of at least 50 litres, comprising:
adding one or more compounds selected from the group consisting of 1,2-propandiol, 1,3-propandiol, ethylene glycol, trehalose, xylitol, arabitol, dulcitol, mannitol, erythritol, cellobiose, sorbitol and a polyether having an average molecular weight less than 1000, to the culture medium before and/or during fermentation, wherein the compound is low metabolizable measured by $(OD_{III}-OD_{II})/(OD_{I}-OD_{II}) < 25\%$ as defined herein.

2. The method according to claim 1, wherein the microorganism is a bacterium or a fungus.

3. The method according to claim 2, wherein the bacterium is a *Bacillus* strain.

4. The method according to claim 1, wherein the polypeptide is a protein or a peptide.

5. The method according to claim 1, wherein the polypeptide is an enzyme, in particular a hydrolase (class EC 3 according to Enzyme Nomenclature).

6. The method according to claim 4, wherein the peptide contains from 2 to 100 amino acids.

7. The method according to claim 1, wherein the compound is added in an amount of least 0.1 % (w/w) of the culture medium.

8. The method according to claim 1, wherein the compound is 1,2-propandiol.

9. The method according to claim 1, wherein in addition to the compound a salt is added to the fermentation medium.

10. The method according to claim 9, wherein the salt is selected from the group consisting of a chloride, a sulphate, a phosphate, a nitrate, and an ammonium salt.

11. The method according to claim 1, wherein the polypeptide of interest is recovered.

12. The method according to claim 1, wherein the polypeptide is recovered after removal of

the microorganism.

13. A method for fermenting a microorganism, producing a polypeptide of interest, in a culture medium of at least 50 litres, comprising:

adding one or more compounds selected from the group consisting of 1,2-propandiol, 1,3-propandiol, ethylene glycol, trehalose, xylitol, arabitol, dulcitol, erythritol, cellobiose, and a polyether having an average molecular weight less than 1000.